



INDIANA DEPARTMENT OF TRANSPORTATION

DRIVING INDIANA'S ECONOMIC GROWTH

Design Memorandum No. 08-13 Technical Advisory

June 16, 2008

TO: All Design, Operations, and District Personnel, and Consultants

FROM: /s/ Anthony L. Uremovich
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SUBJECT: Painting Structural Steel

ADDS: *Indiana Design Manual Section 17-5.11*

EFFECTIVE: September 4, 2008, Letting

I. Structural-Steel Painting

Bridge painting and partial-bridge painting are designated by type. The type refers to the location of the steel to be painted. The types are as follows:

1. Type 1. The steel to be painted at this location is entirely beneath the bridge deck. A beam or girder bridge is a representative example. Type 1 is the most common.
2. Type 2. The majority of the steel to be painted at this location is beneath the bridge deck. However, some steel extends above, but not over the bridge deck. A pony-truss bridge is a representative example.
3. Type 3. The majority of the steel to be painted at this location is above and over the bridge deck. There is also some steel to be painted beneath the bridge deck. A through-truss bridge is a representative example.

A particular structure should have only one Type designation. For example, a through truss with beam-approach spans has a Type 3 designation.

II. Structural-Steel Cleaning

Bridge cleaning and partial-bridge cleaning are designated by the same types as for painting, but are also designated by QP type. The QP designation refers to the contractor's certification level. If the entire structure consists of new steel or was constructed after 1994, the QP-1 designation should be used. If a portion of the structure was constructed before 1995, the QP-2 designation should be used.

III. Pay Items

If all of the structural steel on a bridge is to be painted, the applicable code numbers and pay-item names are as follows:

619-09422	Clean Steel Bridge, Type 1, QP-1
619-09423	Clean Steel Bridge, Type 1, QP-2
619-09424	Clean Steel Bridge, Type 2, QP-1
619-09425	Clean Steel Bridge, Type 2, QP-2
619-09426	Clean Steel Bridge, Type 3, QP-1
619-09427	Clean Steel Bridge, Type 3, QP-2
619-09434	Paint Steel Bridge, Type 1
619-09435	Paint Steel Bridge, Type 2
619-09436	Paint Steel Bridge, Type 3

If only a portion of the structural steel on a bridge is to be painted, the applicable code numbers and pay-item names are as follows:

619-09428	Clean Steel Bridge, Partial, Type 1, QP-1
619-09429	Clean Steel Bridge, Partial, Type 1, QP-2
619-09430	Clean Steel Bridge, Partial, Type 2, QP-1
619-09431	Clean Steel Bridge, Partial, Type 2, QP-2
619-09432	Clean Steel Bridge, Partial, Type 3, QP-1
619-09433	Clean Steel Bridge, Partial, Type 3, QP-2
619-09437	Paint Steel Bridge, Partial, Type 1
619-09438	Paint Steel Bridge, Partial, Type 2
619-09439	Paint Steel Bridge, Partial, Type 3

The pay unit for all of the pay items listed above is square foot (square meter). The quantity is computed as the surface area of the bridge deck, or the out-to-out coping width multiplied by the out-to-out bridge-floor length for each type.

A supplemental description of *Str. No. ____* should be added to each pay-item name, to correspond to the structure number and bridge-file number identified in Recurring Special Provision 101-B-042. This also applies if there is only one structure in the contract.

If only the bearings, end diaphragms, beam ends, etc., are to be cleaned and painted, the pay items listed above for painting a portion of the structural steel should be used. Additional clarification should be provided via a unique special provision, or details should be shown on the plans.

A pay item for surface seal, code number 709-51821, pay unit lump sum, should be included. The supplemental description, *Str. No. ____*, should also be added to this pay-item name.

A pay item for maintaining traffic, code number 801-06775, pay unit lump sum, should be included. The supplemental description, *Str. No. ____*, should also be added to this pay-item name. Corresponding pay items for other traffic-maintenance appurtenances, such as construction signs, temporary traffic barrier, attenuator truck, etc., should continue to be included. The supplemental description, *Str. No. ____*, should not be added to these pay-item names.

The designer should discuss the need for the inclusion of other site-specific work such as clearing, tree trimming, guardrail removal and replacement, working platform, or other unique items that may be required, with the district Office of Construction's project engineer or supervisor who typically handles painting contracts.

If possible, the number of bridge sites in one contract should be limited to not more than three. This will result in more contracts, but it should result in more-competitive bidding. It will also provide a better opportunity of completing the contract within the temperature and humidity restrictions and within the construction season. Figure 08-13A, attached herewith, shows the information that should be provided in the Contract Information book, along with a sample english-units entry. An editable version of this document, identified as Summarization 17-5K, is available on the Department's website, at www.in.gov/dot/div/contracts/design/dmforms/.

IV. Recurring Special Provision

Recurring Special Provision, 619-B-177, attached hereto, should be called for beginning with the September 4, 2008, letting, and through the August 2009 letting. Beginning with the September 2009 letting, the recurring special provision will be incorporated into the INDOT *Standard*

Specifications. The provision will then no longer be required to be called for in specific contracts.

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Attachment

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